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DEVICE FOR IRRADIATING LARGE PARABOLIC-REFLECTOR ANTENNAE

by

E.A. Dudkovskiy



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90 08 15 078

HUMAN TRANSLATION

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DEVICE FOR IRRADIATING LARGE PARABOLIC-REFLECTOR
ANTENNAE

By: E.A. Dudkovskiy

English pages: 2

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Block	Italic	Transliteration	Block	Italic	Transliteration
А а	<i>А а</i>	A, a	Р р	<i>Р р</i>	R, r
Б б	<i>Б б</i>	B, b	С с	<i>С с</i>	S, s
В в	<i>В в</i>	V, v	Т т	<i>Т т</i>	T, t
Г г	<i>Г г</i>	G, g	У у	<i>У у</i>	U, u
Д д	<i>Д д</i>	D, d	Ф ф	<i>Ф ф</i>	F, f
Е е	<i>Е е</i>	Ye, ye; E, e*	Х х	<i>Х х</i>	Kh, kh
Ж ж	<i>Ж ж</i>	Zh, zh	Ц ц	<i>Ц ц</i>	Ts, ts
З з	<i>З з</i>	Z, z	Ч ч	<i>Ч ч</i>	Ch, ch
И и	<i>И и</i>	I, i	Ш ш	<i>Ш ш</i>	Sh, sh
Й й	<i>Й й</i>	Y, y	Щ щ	<i>Щ щ</i>	Shch, shch
К к	<i>К к</i>	K, k	Ъ ъ	<i>Ъ ъ</i>	"
Л л	<i>Л л</i>	L, l	Ы ы	<i>Ы ы</i>	Y, y
М м	<i>М м</i>	M, m	Ь ь	<i>Ь ь</i>	'
Н н	<i>Н н</i>	N, n	Э э	<i>Э э</i>	E, e
О о	<i>О о</i>	O, o	Ю ю	<i>Ю ю</i>	Yu, yu
П п	<i>П п</i>	P, p	Я я	<i>Я я</i>	Ya, ya

*ye initially, after vowels, and after ъ, ь; e elsewhere.
When written as ѐ in Russian, transliterate as yě or ě.

RUSSIAN AND ENGLISH TRIGONOMETRIC FUNCTIONS

Russian	English	Russian	English	Russian	English
sin	sin	sh	sinh	arc sh	sinh ⁻¹
cos	cos	ch	cosh	arc ch	cosh ⁻¹
tg	tan	th	tanh	arc th	tanh ⁻¹
ctg	cot	cth	coth	arc cth	coth ⁻¹
sec	sec	sch	sech	arc sch	sech ⁻¹
cosec	csc	csch	csch	arc csch	csch ⁻¹

Russian English

rot curl
lg log

GRAPHICS DISCLAIMER

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DEVICE FOR IRRADIATING LARGE PARABOLIC-REFLECTOR ANTENNAE

E. A. Dudkovskiy

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Committee on Inventions and Discoveries of the Council of Ministers USSR

→ We know about devices for irradiating large parabolic-reflector antennae.

→ The described device is different from the known devices because the parabolic reflector used in it is cofocal with the basic mirror, which is irradiated by a cophasal emitter grid with a uniform amplitude distribution. This makes it possible to obtain the maximum utilization factor of the mirror opening cross section.

> The figure shows a schematic diagram of the device for irradiating large parabolic aerials. *Russian translation. (SMA) —*

Parabolic reflector 1 is the emitter; like basic mirror 2, it is mounted so that its focus 3 coincides with that of the basic mirror. The reflector 1 irradiates the in-phase emitter grid 4 with a uniform amplitude distribution installed several meters from the reflector. If the dimensions of the grid and the reflector equal several dozen waves and the distance between them does not exceed 3-4 grid dimensions, almost all the irradiated energy except for a few percents falls on the reflector, creating a nearly uniform current distribution in it.

Patent Claim

A device for irradiating large parabolic-reflector antennae *that is different* because in order to obtain the maximum utilization factor of the mirror opening cross section, it has a parabolic reflector that is cofocal with the basic mirror, which is irradiated by an in-phase emitter grid with a uniform amplitude distribution.

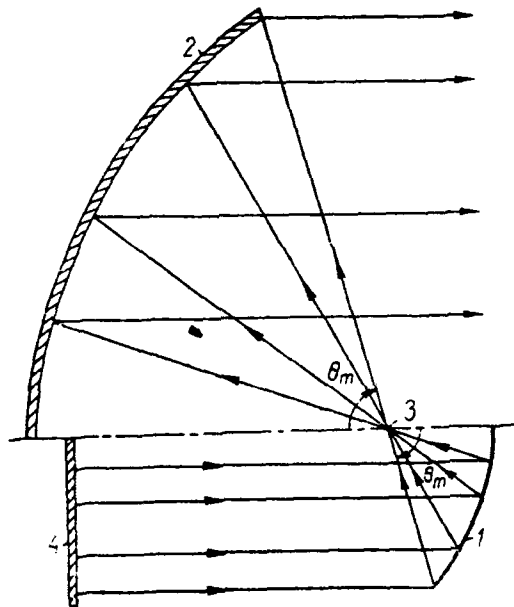


Figure.

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P005 DOE/ISA/DDI	1
P050 CIA/OCR/ADD/SD	2
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